



Not Enough Checkers

by Arya Akhavan (November 2014)

Angles for R.I. = 1.540

63 + 16 girdles = 79 facets

2-fold, mirror-image symmetry

96 index

$L/W = 1.401$ $T/W = 0.254$ $U/W = 0.254$

$P/W = 0.488$ $C/W = 0.271$

$Vol./W^3 = 0.480$

PAVILION

P1	43.00°	02-46-50-94	Cut to centerpoint.
P2	43.58°	01-47-49-95	Meet at culet.
G1	90.00°	96-48	Set stone width.
G2	90.00°	03-45-51-93	Meet P1, P2, G1
P3	43.00°	03-45-51-93	Level girdle.
P4	42.19°	04-44-52-92	Meet P1, P3
P5	42.50°	06-42-54-90	Meet G2, P3, P4
P6	42.09°	07-41-55-89	Meet P4, P5
G3	90.00°	06-42-54-90	Level girdle.
G4	90.00°	20-28-68-76	Meet P5, P6, G3
P7	65.00°	20-28-68-76	Level girdle.
P8	69.20°	24-72	Meet P6, P7
P9	46.70°	96-48	Level girdle.
G5	90.00°	24-72	Level girdle.

CROWN

C1	58.64°	96-48	Set girdle width.
C2	55.77°	03-45-51-93	Level girdle.
C3	52.39°	06-42-54-90	Level girdle.
C4	47.93°	20-28-68-76	Level girdle.
C5	46.94°	24-72	Level girdle.
C6	29.83°	16-32-64-80	Meet G3, G4, C3, C4
C7	26.41°	24-72	Meet C4, C5, C6
C8	22.07°	12-36-60-84	Meet C2, C3, C6
C9	16.00°	96-24-48-72	Meet C1, C2, C8; C6, C7, C8
T	0.00°	Table	Meet C8, C9

I love checkerboards. I really do. This started out as an attempt to see how long of a stone I could write a checkerboard, and this 3x5 pattern was the maximum. Notice that the pavilion facets are VERY close together and will cut extremely quickly, so be careful!!! Works in materials from quartz to zircon (RI = 1.54 - 1.93) with no changes, but written for longer pieces of tourmaline with some surface crazing.

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